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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 June 2009*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   This action is response to the communication filed on June 4, 2009.

2.   Claims 1-27 are pending in this action. Claims 1-2, 6, 8-21 and 25-27 have

been amended.

3.   Applicant has amended claim 21 and 27 in response to non-statutory subject

matter 35 U.S.C. 101 rejections. Accordingly, **35 USC § 101** the rejection to the claim is

withdrawn.

4.   Applicant's arguments with respect to claims 1-21 and 25-27 have been

considered but are moot in view of the new ground(s) of rejection.

Remarks

5.   Wilson teaches the function of Smart Service Control Node in SMS Router and

(the SMS Router may then respond on behalf of the HLR, but instead of directing the

MT text message to the destination mobile as the HLR would have done, it may direct

the MT text message to be routed to an SMS Router in Network B, which SMS Router

is configured to implement the invention. This redirection (replacing a mobile network

location address) may be made conditional on the recipient (second subscriber)

having subscribed to a relevant value-added service, or may be unconditional (Col. 4,

Lines 43), wherein Wilson invention teaches newly amended limitations in claims 1, 20

and 25.

6.   Applicants argue (page 12 of 14), Lines 4, (The SMS delivery....subscribers who

have turned off their handsets or otherwise disconnected from the network, works

seamlessly). Wilson invention handle undeliverable message (Col. 4, Lines. 54, the

SMSC for this message is in network A, and if direct delivery to the recipient is

attempted but unsuccessful, then control is passed back to the originating SMSC),

wherein would have been obvious to those skill in the art, when message did not

reach intended recipient (by turn off handset or out of cover range), the original SMSC

is acknowledged. Applicant has no base to argue that Wilson patent will have to make

an SMS delivery attempt for all subscribers... because status information is unknown

to the SMS router.

Claim Rejections - 35 USC § 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the
> United States before the invention thereof by the applicant for patent, or on an international application
> by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this
> title before the invention thereof by the applicant for patent.

8.   Claims 1-20 and 25-26 are rejected under 35 U.S.C. 102 (e) as being anticipated

by Wilson et al. (US PAT 7,395,077 B2).

        Regarding claim 1," A method of managing SMS messages in a first

mobile operator network, said network comprising a plurality of subscribers and a

Short Message Service Centre (SMSC), the method comprising the steps of:

starting a delivery attempt of the SMS message from a first subscriber to a

second subscriber via said SMSC" Wilson discloses (Abstract, the arrangement

being such that any text messages intended by the sender (1) to be delivered to

the said subscriber, as intended receiver thereof, are directed to the message

processing means which then implements the delivery mode previously selected

by the subscriber);

"Intercepting transparently to the SMSC said SMS message delivery

attempt from the first subscriber in the network before delivery of said SMS

message" Wilson discloses (Col 4, lines 7-10, Mobile Terminated (MT) where the

sender subscribes to network A and the recipient to network B, and so the MO

text message first passes through the SMSC of network A, where it is converted

to MT format);

"Replacing a mobile location address of said second subscriber (Col. 4,

Lines 43, the SMS Router may then respond on behalf of the HLR, but instead of

directing the MT text message to the destination mobile as the HLR would have

done, it may direct the MT text message to be routed to an SMS Router in

Network B, which SMS Router is configured to implement the invention. This

redirection (replacing **a mobile network location address**) may be made

conditional on the recipient (**second subscriber**) having subscribed to a relevant

value-added service, or may be unconditional, wherein Wilson invention teaches

newly amended limitations in claims 1, 20 and 25. in an HLR query response with

the network location address of a smart services control node"

"Routing said intercepted SMS message delivery attempt via a smart

services control node in the network" Wilson discloses (Col 6, lines 8-9, this

query is caused by network B to pass through an SMS router [13].);

"Examining said message delivery attempt for possible invocation of a

smart service to said SMS message"; Wilson discloses (Col 6, lines 9-12, if the

router detects that the message is for a recipient who has configured special

delivery settings, e.g. delivery by email to an email account [9] or by fax to a fax

machine [10]);

"Invoking said smart services for said SMS message destined to said

subscriber in response to said examination" Wilson discloses (Col 6, lines 11-13,

then the router responds to the routing query, giving the address of the SMS

Router [3] in network),wherein router detects that the message and responds

accordingly as smart service control.

Regarding claim 2, "between a subscriber of the first mobile operator

network and another subscriber of a second mobile operator network in a

telecommunications system, the method _further_ comprising the steps of:

delivering a SMS message from said first subscriber in said first mobile operator

network to said subscriber of said second mobile operator network" Wilson

discloses (Col 6, lines 3-5, With reference to FIG. 2, a message sender [1] is

connected to a telecommunications network A and wishes to send a text

message to a recipient [2] who subscribes to network B);

"Intercepting a SMS message inbound delivery attempt in said second

mobile operator network before delivery of said SMS message" Wilson discloses

(Col. 6, lines 8-9, This query is caused by network B to pass through an SMS

router);

"Replacing a mobile location address of said second subscriber (Col. 4,

Lines 43, the SMS Router may then respond on behalf of the HLR, but instead of

directing the MT text message to the destination mobile as the HLR would have

done, it may direct the MT text message to be routed to an SMS Router in

Network B, which SMS Router is configured to implement the invention. This

redirection (replacing **a mobile network location address**) may be made

conditional on the recipient (**second subscriber**) having subscribed to a relevant

value-added service, or may be unconditional, wherein Wilson invention teaches

newly amended limitations in claims 1, 20 and 25. in an HLR query response with

the network location address of a smart services control node";

"Routing said intercepted SMS message delivery attempt via a smart

services control node in second operator mobile network"; Wilson discloses (Col

6, lines 9-12,If the router detects that the message is for a recipient who has

configured special delivery settings, e.g. delivery by email to an email account [9]

or by fax to a fax machine [10]);

"Examining said message delivery attempt for possible invocation of a

smart service to said SMS message; Wilson discloses (Col. 6, lines 12-13, then

the router responds to the routing query, giving the address of the SMS Router

[3] in network B);

"Invoking said smart services for said SMS message destined to said

subscriber of said second mobile operator network in response to said

examination" Wilson discloses (Col 6, lines 14-17, he message then passes from

the SMSC [12] to the SMS Router [3]. As before, the recipient may configure

delivery options in the SMS router [3] by means of commands (e.g. using USSD)

sent to the router via the HLR [4].),wherein subscriber B will performs same as

subscriber A as illustrated herein.

Regarding claim 3,"wherein the step of intercepting includes intercepting

an inbound HLR query associated with said message delivery attempt. Wilson

discloses (Col 6, lines 15-22, the recipient may configure delivery options in the

SMS router [3] by means of commands (e.g. using USSD) sent to the router via

the HLR [4]. If the router detects that the message is for a recipient who has

configured special delivery settings, e.g. delivery by email to an email account [9]

or by fax to a fax machine [10], then the router can perform delivery via the

relevant interface in addition to, or instead of, SMS delivery), wherein message

delivery through HLR query associated by commands.

Regarding claim 4," wherein the step of intercepting includes intercepting

an inbound HLR query associated with said message delivery attempt and

examining said intercepted HLR query such that said HLR query provides an

indication that a smart service needs to be applied to said SMS message and

route the SMS message to the smart services control node" Wilson discloses

(Col 2, lines 65-67, The message processing means may be, for example, an

HLR or other signaling means, but preferably the message processing means is

an SMS router),wherein a smart service node is an SMS router is invoking by

HLR query.

Regarding claim 5, " wherein said indication from the HLR Query is

associated with one or more of the following: a SMS service, a specific

subscriber directory number (MSISDN), a directory number in the HLR Query

matches a specific number prefix, a specific SMSC identified by its PLMN

network address, a foreign SMSC network address" Wilson discloses (Col 2,

lines 55-64, HLR (home location register) and a signal processing means, said

signal processing means being configured in association with the HLR to

intercept routing queries sent to the HLR of said network from another network,

for receiving a text message from such another network, to communicate with the

HLR but to provide a modified address which will cause the text message from

said another network to be sent to the message processing means which will

then effect delivery in accordance with at least one previously selected mode of

delivery),wherein a process provides modified address to deliver message from

one network to another network.

As to claim 6 has limitations and phrase of alternative or similar to those

treated in the above claim 5 rejection(s), and are met by the references as

discussed above.

Regarding claim 7, "wherein the step of intercepting said message delivery attempt is based on a condition that said query originated from said SMSC or another mobile network" Wilson discloses (Col 2, lines 55-64, HLR (home location register) and a signal processing means, said signal processing means being configured in association with the HLR to intercept routing queries sent to the HLR of said network from another network, for receiving a text message from such another network, to communicate with the HLR but to provide a modified address which will cause the text message from said another network to be sent to the message processing means which will then effect delivery in accordance with at least one previously selected mode of delivery),wherein delivery attempt is based on a condition that said query originated from said SMSC or another mobile network.

Regarding claim 8, "further comprising the step of routing said SMS message from said smart message control node to said real location address wherein said SMS message is routed to said real network location address from an address stored in said smart services control node previously obtained from said intercepted HLR query "Wilson discloses (Col 1, lines 55-58, SMS Routers may implement throttling, load balancing, address translation and other facilities within the network to improve the efficiency or scope of services offered to subscribers), wherein an address stored in SMS router previously obtained from intercepted HLR query.

Regarding claim 9, "<u>further</u> comprising the step of terminating said SMS

message delivery attempt in the said smart services control node when the said

smart service requires that the said SMS message is not delivered to the said

subscriber of the said second operator network" Wilson discloses (Col 1, lines

52-58, Wilson discloses (Col 6, lines 12-13, traffic may be directly delivered to

the recipient, and only if the recipient is unreachable is the message then passed

on to a store-and-forward device instead. SMS Routers may implement throttling,

load balancing, address translation and other facilities within the network to

improve the efficiency or scope of services offered to subscribers.),wherein

undeliverable message passed to smart node for future use.

Regarding claim10, "<u>further</u> comprising the step of terminating said SMS

message delivery attempt when said condition of said intercepted delivery

attempt indicates in said second operator network that said SMS message

originates from a barred originating entity belonging to another network" Wilson

discloses (Col 3, lines 53-55, A key feature of the present invention is that it

permits recipients of text messages to enjoy some control over how and/or when

messages are delivered to them) and (Col 4, lines 51-57, Once the MT text

message has arrived at an SMS router in network B, it may be handled in

essentially the same way as for the MO case, with the exception that the

message is not ever routed to the SMSC in network B. The SMSC for this

message is in network A, and if direct delivery to the recipient is attempted but

unsuccessful, then control is passed back to the originating SMSC), wherein both

MO and MT which may reside in second network have some control over the

message delivery.

Regarding claim 11, "further comprising the step of triggering the

execution of smart service logic associated with said smart services SMS control

node in response to condition based on the content of said SMS message"

Wilson discloses (Col 3, lines 49-52, Filtering according to textual content could

allow the user to specify key words, names or phrases that would trigger certain

delivery rules) and (Col. 5, lines 3-5, The HLR may then be configured to pass

these particular commands to the SMS Router(s) in order to configure the

desired delivery options),wherein based on the content of messages, trigger

SMS router execute some delivery option.

Regarding claim 12 has limitations and phrase of alternative or similar to

those treated in the above claim 11 rejection(s), and are met by the references

as discussed above.

Regarding claim 13, "further comprising the step of generating a unique

identifier for said SMS message at said smart services SMS control node" Wilson

discloses (Col 6, lines 14-22, the message then passes from the SMSC [12] to

the SMS Router [3]. As before, the recipient may configure delivery options in

the SMS router [3] by means of commands (e.g. using USSD) sent to the router

via the HLR [4]. If the router detects that the message is for a recipient who has

configured special delivery settings, e.g. delivery by email to an email account [9]

or by fax to a fax machine [10], then the router can perform delivery via the

relevant interface in addition to, or instead of, SMS delivery), wherein special

setting for SMS message from smart service node (SMS router).

Regarding claim14, "<u>further</u> comprising the step of generating a unique

identifier for said SMS message at said smart services SMS control node,

wherein said unique identifier is generated from one or more of the following

SMS message parameters: Originating Address, Destination Address, message

fragment number, SMSC address or SMS Centre timestamp" Wilson discloses

(Col. 5, lines 20-36, Using the techniques described above, potential recipients of

messages could be offered services including but not limited to normal message

delivery delayed message delivery during certain hours Diversion of messages to

fixed line when in home cell diversion of messages to an alternative mobile

number diversion of messages on a time of day basis conversion of messages to

email, fax or other medium conversion of messages to voice for delivery in a

voice call archiving of received messages special handling of certain messages

according to origination number, e.g. white lists, black lists removal of `spam`

messages filtering of messages by address information or content filtering or

barring of messages with unsuitable content any combination of the above

),wherein SMS router generate both MO and MT addresses, timestamp and

special handling information about SMS message.

Regarding claim 15 has limitations and phrase of alternative "or" similar to

those treated in the above claim 14 rejection(s), and are met by the references

as discussed above.

Regarding claim 16, "further comprising the step of comparing the

generated unique identifier with unique identifiers for each SMS message

delivery attempt processed by said smart services SMS node for detecting a

subsequent attempt of an SMS message from a remote SMSC after the first

delivery attempt" Wilson discloses (Col 4, lines 43-47, The SMS Router may then

respond on behalf of the HLR, but instead of directing the MT text message to

the destination mobile as the HLR would have done, it may direct the MT text

message to be routed to an SMS Router in Network B, which SMS Router is

configured to implement the invention), wherein SMS message is delivered to

second network B by smart service node SMS router.

Regarding claims 17 and 18, have limitations and phrase of alternative

"or" similar to those treated in the above claim 16 rejection(s), and are met by the

references as discussed above.

Regarding claim 19, "further comprising the steps of generating a

database of unique identifiers in said storage memory and deleting said stored

unique identifiers after a preset period of time" Wilson discloses (Col 1, lines 64-

66, also some networks support various text prefixes within the body of the

message to control such features as delayed or timed delivery), wherein preset

time of delivery can be added as unique identifier to SMS.

Regarding to claim 20 has limitations and phrase of alternative "or" similar

to those treated in the above claim 1 rejection(s), and are met by the references

as discussed above.

Regarding claims 25 and 26, have limitations and phrase of alternative or

similar to those treated in the above claim 1 rejection(s), and are met by the

references as discussed above.

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

10.   Claims 21 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Wilson as applied to claims1-20 above in view of Warsta et al. (US-PGPUB

2004/0181550 A1).

Regarding to claims 21 and 27, Wilson discloses SMS router (smart service

control node) and message process from first network to second network. However,

Wilson does not explicitly disclose a computer program comprising program instructions

for causing a computer to perform the method of claim 1 and 20.

In an analogous art, Warsta discloses (¶64, using the description provided

herein, the invention may be implemented as a machine, process, or article of

manufacture by using standard programming and/or engineering techniques to produce

programming software, firmware, hardware or any combination thereof. Any resulting

program(s), having computer-readable program code, may be embodied on one or

more computer-usable media, such as disks, optical disks, removable memory devices,

semiconductor memories such as RAM, ROM, PROMS, etc. Articles of manufacture

encompassing code to carry out functions associated with the present invention are
intended to encompass a computer program that exists permanently or temporarily on
any computer-usable medium or in any transmitting medium which transmits such a
Program), wherein computer program execute the process for SMS value added
service.

Therefore, it would have been obvious to one of ordinary skill in the art at
the time the invention was made to be motivated to implement the handover of
Wilson teaching after modifying it to incorporate tunnel technology of Warsta
provides content adaptations for all known network device capabilities are
cached for future use (see abstract). Rationales for arriving at a conclusion of
obviousness suggested by the Supreme Court's decision in KSR include
motivation is combining prior art elements according to known method to yield
predictable result.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in
this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP
§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37
CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE
MONTHS from the mailing date of this action. In the event a first reply is filed within
TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to KUO WOO whose telephone number is (571)270-7266.

The examiner can normally be reached on 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KUO WOO/
Examiner, Art Unit 2617

/Lester Kincaid/
Supervisory Patent Examiner, Art Unit 2617